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The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte STEVEN J. BOWEN

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Appeal No. 96-1349  
Application 08/002,168<sup>1</sup>

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ON BRIEF

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Before THOMAS, JERRY SMITH and FLEMING, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-3 and 5-9, which constitute all the claims remaining in the application.

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<sup>1</sup> Application for patent filed January 8, 1993.

The invention pertains to a method of normalizing a data structure for use when a first process executing in a first computer makes a remote procedure call on a second process executing in a second computer.

Representative claim 1 is reproduced as follows:

1. A method, executed by a first process in a first computer system, of normalizing a data structure having a first member definition structure which includes at least one member and at least one padding bit, said data structure being transmitted to the first process from a second process executing in a second computer system using a remote procedure call, comprising the steps of:

(a) receiving, on said first computer system, the data structure;

(b) performing, by said first process in said first computer system, a logical bitwise AND operation of the data structure with a template structure and producing a normalized data structure, said template structure having a second member definition structure equivalent to the first member definition structure and having member bits set to 1 and padding bits set to 0; and

(c) replacing the data structure with the normalized data structure.

The examiner relies on the following reference:

Davidson et al. (Davidson)	5,307,490	Apr. 26, 1994
		(filed Aug. 28, 1992)

Claims 1-3 and 5-9 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on an inadequate disclosure.

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Claims 1-3 and 5-9 also stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Davidson taken alone.

Rather than repeat the arguments of appellant or the examiner, we make reference to the brief and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner, the arguments in support of the rejections and the evidence of obviousness relied upon by the examiner as support for the obviousness rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the disclosure in this application describes the claimed invention in a manner which complies with the requirements of 35 U.S.C. § 112. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of

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the invention as set forth in claims 1-3 and 5-9. Accordingly,  
we reverse.

We consider first the rejection of claims 1-3 and 5-9 under the first paragraph of 35 U.S.C. § 112. The examiner has objected to the specification "as failing to adequately teach how to make and/or use the invention i.e [sic] failing to provide an enabling disclosure to support claims 1-3 and 5-9" [answer, page 3]. The examiner explains that appellant has not disclosed how the computer program code can perform the logical bitwise AND operation to produce a normalized data structure. Finally, the examiner concludes that it would require undue experimentation for one of ordinary skill in the art to make and use the invention.

Appellant makes two major arguments in response to this rejection. First, appellant argues that the examiner has failed to satisfy his initial burden of demonstrating why the specification is not enabling. Second, appellant argues that the claimed invention is clearly described in the specification in a manner which would enable others to make and use the claimed invention as required by Section 112.

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To comply with the enablement clause of the first paragraph of 35 U.S.C. § 112, the disclosure must provide an adequate description such that the artisan could practice the claimed

invention without undue experimentation. In re Scarbrough, 500 F.2d 560, 566, 182 USPQ 298, 303 (CCPA 1974); In re Brandstadter, 484 F.2d 1395, 1407, 179 USPQ 286, 295 (CCPA 1973). The burden is initially upon the examiner to establish a reasonable basis for questioning the sufficiency of the disclosure. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563 (CCPA 1982). The Patent and Trademark Office (PTO) has the burden of giving reasons, supported by the record as a whole, why the specification is not enabling. Showing that the disclosure entails undue experimentation is part of the PTO's initial burden. In re Angstadt, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976). Enablement is not precluded by the necessity for some experimentation. However, experimentation needed to practice the invention must not be undue experimentation. The key word is "undue",

not "experimentation." In re Wands, 858 F.2d 731, 736-37, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). When the rules of law just noted are applied to the facts of this application, it is clear that the examiner has failed to satisfy the burden of providing a reasonable basis for questioning the sufficiency of the disclosure, and that the position of the examiner is substantively incorrect in any case.

The invention which must be disclosed within the meaning of 35 U.S.C. § 112 is the invention as set forth in the claims. When claim 1 (quoted above) is considered, it can be seen that the following three steps are performed: 1) receiving a data structure, 2) ANDing the received data structure bitwise with a specific template structure, and 3) replacing the received data structure with the result of the ANDing step. We are at a loss to understand why the examiner finds this invention not to be enabled by the present specification. These three steps could hardly be more routine for the person skilled in the data processing arts. The application figures and corresponding description describe precisely how the process is performed. The examiner's rejection is based on nothing more than a bare

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opinion, and it cannot be substantiated by any factual assertions proposed by the examiner. Therefore, the examiner has failed to provide a reasonable basis for questioning the sufficiency of the disclosure.

Notwithstanding the fact that the examiner has presented no reasonable basis for questioning the sufficiency of the disclosure, we are unable to understand why the examiner has ignored the fact that appellant submitted a computer program which would carry out the claimed invention as an appendix to the specification. Thus, even if the examiner had reasonably questioned the enablement of the disclosure, he has presented no reasons why the implementing computer program originally disclosed by appellant would not be sufficient to satisfy the enablement provision of 35 U.S.C. § 112.

It has not been particularly helpful to us that in response to specific contentions raised by appellant the examiner has simply repeated verbatim the same statements made in rejecting the claims in the first place. The response to arguments section of the examiner's answer should be just that -- a response to specific arguments made by appellant and not simply a repetition of the rejection.

In summary, the examiner's rejection of claims 1-3 and 5-9 under 35 U.S.C. § 112 is not sustained.

We now consider the rejection of claims 1-3 and 5-9 under 35 U.S.C. § 103 as unpatentable over the teachings of Davidson. The examiner points out that Davidson normalizes a data structure which is the purpose of appellant's invention. The examiner admits that "Davidson did not explicitly give details about producing the normalized data structure by performing a logical bitwise AND operation of the data structure with a template data structure" [answer, page 5]. The examiner concludes, however, that it would have been obvious to normalize a data structure in this manner because it "would have performed a very efficient comparison of the data structure than the marshalling mechanism" which has the effect of "thereby increasing the overall performance and reliability of the data structure comparison mechanism" [answer, page 5].

Appellant responds that the examiner has failed to set forth a prima facie case of obviousness. Appellant argues that the examiner has modified the teachings of Davidson without any suggestion from within the prior art. Appellant also argues that Davidson discloses no template structure as claimed and suggests



nothing about performing a logical bitwise AND operation on bits of a data structure and a template structure. The examiner's response to appellant's arguments is to simply repeat the statements of the rejection.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a cogent reason why one having

ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475

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U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

As indicated by the cases just cited, the examiner has at least two responsibilities in setting forth a rejection under 35 U.S.C. § 103. First, the examiner must identify all the differences between the claimed invention and the teachings of the prior art. Second, the examiner must explain why the identified differences would have resulted from an obvious modification of the prior art. In our view, although the examiner has made an effort to identify the differences between the claimed invention and the prior art, he has failed to properly support his conclusion that such differences would have been obvious to one having ordinary skill in the art.

The examiner's position can be stated basically to be that the modification of Davidson necessary to arrive at the claimed invention would have been obvious to the artisan because it would improve efficiency, performance and reliability of the

data structure comparison mechanism. While this result indicated by the examiner is undoubtedly correct, it is not a valid basis for rejection of a claim. It explains more why appellant wishes to patent such a process. Since most inventions are designed to improve efficiency, performance or reliability, the examiner's analysis would make it very difficult to patent anything.

Our analysis of independent claims 1-3 and our review of the evidence supplied by the examiner in support of the rejection indicate that the examiner has failed to set forth a prima facie case of obviousness. Each of the independent claims recites specific details of a template data structure and a specific procedure for creating the normalized data structure. Although the creation of a normalized data structure may be present in Davidson, there is no description in Davidson of using a template data structure having the claimed details or of using a bitwise AND operation in the generation of the normalized data structure as claimed. We are unable to conclude that the specific steps for normalizing a data structure as recited in the claims is suggested by Davidson even if similar results are achieved.

The examiner has not considered the specific recitations of the independent claims, but instead, has equated the overall method to a concept and argued that the concept was well known

and would have been obvious to the artisan because it would improve performance. The examiner has essentially dismissed all noted differences between the claims and the prior art as being irrelevant, nondistinguishing limitations. Merely asserting that the claims and the prior art both normalize a data structure does not address the specific differences between the claims and the applied prior art. It is the specific sequence of steps recited in the claims which must be analyzed and not whether the result achieved by the claimed invention has been achieved by the prior art as well. In other words, the rejection must focus on the actual steps recited in the claims and not on whether the function being implemented by the method was well known in the art. The examiner's approach does not establish a prima facie case of obviousness.

The only suggestion for performing the steps of appellant's claims using the specific claimed template structure comes from appellant's own disclosure. Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. Para-Ordnance Manufacturing v. SGS Importers International Inc., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), cert. denied, 117 S. Ct. 80 (1996). Since

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the examiner has not relied on any teachings of the applied prior art which would have suggested the invention as specifically set forth in the claims on appeal, we do not sustain the rejection of claims 1-3 and 5-9 as unpatentable over Davidson.

In conclusion, we have not sustained the rejection of claims 1-3 and 5-9 under either 35 U.S.C. § 112 or § 103. Therefore, the decision of the examiner rejecting claims 1-3 and 5-9 is reversed.

REVERSED

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
JERRY SMITH	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
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